IN THE CLAIMS:

Claim 1 (Currently Amended) A bulk silicon etching method comprising the following steps in the order named ~~of~~:

(a) providing a silicon wafer;

(b) diffusing the wafer with dopant, whereby the diffusion creates a PN-junction at a predetermined PN-junction depth throughout the surface of the wafer;

(c) providing a mask;

(d) positioning the mask in overlying relation to the surface of the wafer;

(e) patterning a layer of oxide on the surface of the wafer, whereby the pattern of the oxide layer is defined by the mask;

(f) etching the wafer to create ~~recessed areas~~ recesses in the wafer in the areas that are not patterned with the oxide layer ~~coincident with the patterned oxide~~, whereby the etching step is sufficient to etch away the ~~surface~~ wafer to a depth below the PN-junction depth created by the diffusion step, thereby creating recessed areas having sidewalls, the sidewalls characterized by the presence of the PN-junction above the PN-junction depth and the absence of ~~surface~~ the PN-junction below the PN-junction depth;

(g) hydrofluoric acid etching the wafer to form porous silicon thereon, whereby the porous silicon is formed ~~coincident with~~ in the ~~surface wafer~~ sidewalls of the recessed areas characterized by the absence of ~~surface~~ the PN-junction; and

(h) subjecting the wafer ~~surface~~ to wet etching resulting in dissolution of the porous silicon.

Claim 2 (Previously Cancelled)

Claim 3 (Previously Cancelled)

Claim 4 (Original) The method of claim 1, wherein the silicon wafer is an N-type silicon wafer.

Claim 5 (Original) The method of claim 1, wherein the dopant is a P-type dopant.

Claim 6 (Original) The method of claim 1, wherein the silicon wafer is a P-type silicon wafer.

Claim 7 (Original) The method of claim 1, wherein the dopant is an N-type dopant.

Claim 8 (Currently Amended) The method of claim 1, wherein the step (e) of patterning a layer of oxide on the surface of the wafer further comprises sputtering the oxide layer.

Claim 9 (Currently Amended) The method of claim 1, wherein the step (f) of etching the wafer further comprises etching the wafer with potassium hydroxide.

Claim 10 (Currently Amended) The method of claim ~~7~~ 9, further comprising etching the wafer with potassium hydroxide for about ten minutes.

Claim 11 (Currently Amended) The method of claim 1, wherein the step (h) of subjecting the wafer surface to wet etching, further comprises subjecting the wafer surface to potassium hydroxide.

Claim 12 (Currently Amended) The method of claim 1, wherein the step (h) of subjecting the wafer surface to wet etching, further comprises subjecting the wafer surface to tetramethyl ammonium hydroxide.

Claim 13 (Previously Amended) The method of claim 11, wherein the wafer surface is subjected to potassium hydroxide for about thirty seconds.

Claim 14 (Previously Amended) The method of claim 12, wherein the wafer surface is subjected to tetramethyl ammonium hydroxide for about thirty seconds.

Claim 15 (Cancelled)